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August 1, 2006

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station, 2nd Floor Boston, MA 02110

Re:

NSTAR Gas Company, D.T.E. 06-44

Dear Secretary Cottrell:

On behalf of NSTAR Gas Company (the "Company"), please find attached the Company's responses to the Attorney General's Second Set of Information Requests in the above-referenced proceeding.

Please contact me if you have any questions regarding the filing. Thank you for your consideration and assistance in this matter.

John K. Habib

Enclosures

Carol M. Pieper, Hearing Officer cc:

Andréas Thanos, Assistant Director, Gas Division

Ken Dell Orto, Gas Division Elizabeth Jackson, Gas Division

Jamie Tosches, Assistant Attorney General

D.T.E. 06-44

Information Request: AG-2-1

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-1

Please refer to Exh. MAG-1, at 4, lines 16-21, at 5. Please provide a map depicting the NSTAR Gas Company's ("NSTAR" or "Company") system and existing pipeline interconnections, storage facilities, and liquified natural gas ("LNG") facilities. Include labels identifying NSTAR's city gates.

Response

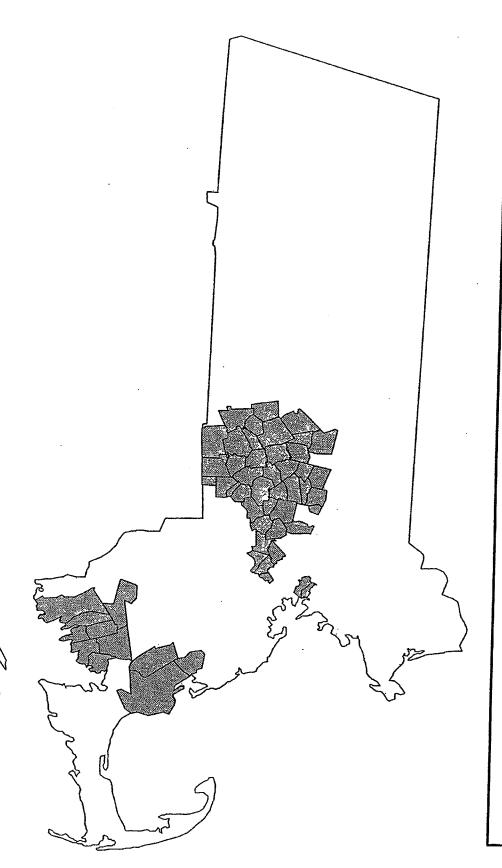
Attachment AG 2-1 depicts the NSTAR Gas system, subject to the following modifications:

The following new facilities are not identified on Attachment AG-2-1:

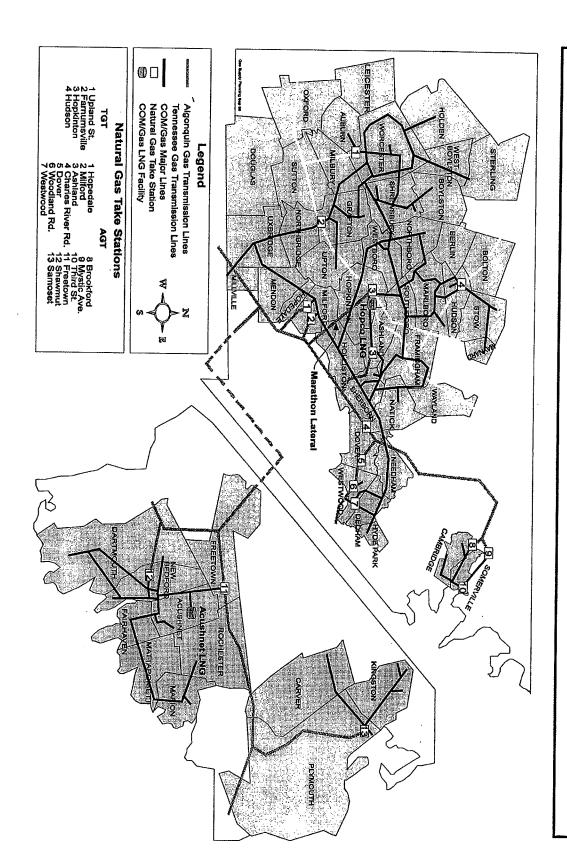
- Tennessee Marlborough station
- ⇒ This station is located at the intersection of the Tennessee pipeline and the NSTAR Gas line in Marlborough.
- Tennessee Framingham station
- ⇒ This station is located at the intersection of the Tennessee system and the NSTAR Gas line in Framingham.
- Algonquin Pine Hills station (Pine Hills)
- This station is located downstream of the lateral that serves the Plymouth station on the same line that extends towards the KeySpan Energy Delivery stations in Bourne and Sagamore.

Also, please note that the Marathon Station is not included on the map. The Marathon Station is owned by Algonquin and is located at the site of the Hopkinton LNG plant and the site of the Tennessee - Hopkinton station. Finally, please note that, although Attachment AG-2-1 indicates that there are three Algonquin stations serving Cambridge, only two (Brookford and Mystic) are still in operation.

NSTAR Gas Service Area



NSTAR Gas Service Area



D.T.E. 06-44

Information Request: AG-2-2

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-2

Did any of the companies responding or inquiring about the Request for Proposals ("RFP") express any dissatisfaction with any portions of the bidding process or with how the Company handled, evaluated, etc. the bids? Please explain.

Response

None of the companies responding to the RFP expressed dissatisfaction with the process.

D.T.E. 06-44

Information Request: AG-2-3

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-3

Please outline the analysis and forecasting process that the Company underwent to determine that it needed the additional resources that it sought out in its July 2005 RFP.

- (a) State whether that analysis and forecasting process included additional forecasting beyond the forecasts in the forecast and supply plan.
- (b) Provide any additional forecasts or other analysis used to make this determination.

Response

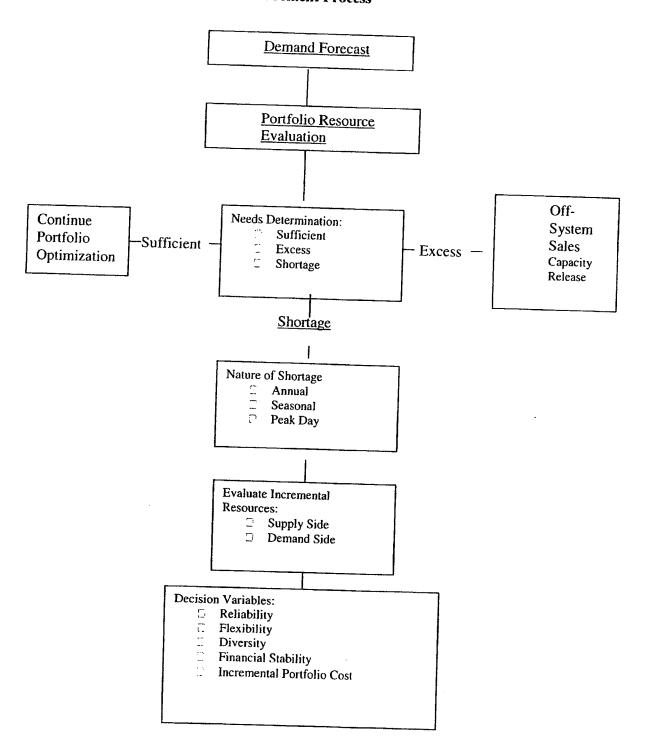
The Company's resource planning process is described in the Company's Department-approved Load Forecast and Resource Plan (see Section VI - Resource Planning Process, attached as Attachment AG 2-3). The Company relied on the results of this planning process to derive the July 2005 RFP, and no additional forecasts were utilized for this purpose.

VI. RESOURCE PLANNING PROCESS

A. Goals and Objectives

NSTAR Gas has assembled a flexible and diverse portfolio of resources to meet its obligation to provide least-cost and reliable service to its firm customers. In order to meet this obligation, the Company employs a proven and reliable approach to demand forecasting and resource procurement. To this end, the Company identifies, evaluates, and acquires the amount and mix of supplies and capacity that minimizes cost while reliably meeting firm demand requirements. Table VI-1 is a schematic representation of the Company's resource evaluation and planning process.

Table VI-1: Resource Procurement Process



B. Description of Supply Model

NSTAR Gas uses New Energy Associates' SENDOUT® linear programming optimization model to calculate the least-cost dispatch of existing and incremental resources to meet the Company's load requirements. The SENDOUT® model is a valuable tool that performs an objective economic analysis and evaluation of alternative supply and demand-side management options. The SENDOUT® model is used to:

- Analyze proposed supply contracts or changes in a supplier's rate structure;
- Analyze proposed transportation contracts or changes in a transporter's rate structure;
- Consider the benefits of increased or decreased capacity or supply resources;
- Optimize capacity-release decisions;
- Prepare daily, monthly, and seasonal operational dispatch plans;
- Prepare gas supply budgets and regulatory filings;
- Generate studies of avoided, or marginal cost of gas;
- Evaluate and incorporate demand-side measures equally on a par with supply-side resources; and
- Study the economic effects of changes in load.

Prior to running SENDOUT®, the model must be provided with all relevant input data, including the following:

 Sendout forecast expressed as daily base and heat loads per effective degree day;

- 2. Rate, volume, and term data for each pipeline segment;
- 3. Rate, volume and term data for each storage entitlement, including LNG;
- 4. Price, volume and term data for all supply contracts;
- 5. Usage factors or load savings from DSM programs;
- 6. Operational assumptions, time horizons, reliability criteria; and
- 7. Daily weather (EDD) inputs.

SENDOUT® then determines: 1) the optimal quantity and mix of resources to be used; 2) scheduling of supplies from the selected contracts; 3) the costs associated with use of the specified resources; 4) peak-day demands; 5) the nature and extent of any unmet demand; 6) inventory levels of storage and LNG supplies; and 7) any supply shortfalls.

In order to meet demand and reliability requirements in a least-cost fashion, SENDOUT® determines the least-cost solution within a given set of constraints by employing a linear programming algorithm with a network optimization. By using linear programming, SENDOUT® automatically takes physical limitations and contract constraints into account, and determines the minimum cost dispatch of the system for the specified time horizon. SENDOUT® performs the analysis comprehensively, taking into account thousands of relationships and variables, and performing thousands of iterations until it reaches the least-cost solution.

SENDOUT® can view the designated study period as one optimization interval, or as a series of intervals, regardless of length. When SENDOUT® is requested to optimize existing supplies against demand for an interval (given a set of input criteria), it

determines the optimal mix of supply contract nominations, storage injection and withdrawal schedules, and transportation dispatch that minimize total variable operating costs, while satisfying all specified physical and reliability constraints.

If the Company has a new supply resource which it wishes to evaluate, however, the Company will run the resource mix module to determine the impact of the new supply on the total cost (i.e., fixed and variable costs) of the Company's portfolio. This resource mix analysis is performed when the Company identifies new potential resources that may be available to either meet unsupplied demand or to assess a potentially lower cost replacement to an existing resource.

In the event the Company identifies a number of new resource options, the resource mix module will contrast the total cost impact that each alternative would have on the portfolio and provide insight as to which option or combination of options will best satisfy the Company's least-cost planning requirements.

The resource mix module is an extension of the basic SENDOUT® model and allows optimization of existing and new contract capacity levels by taking into account fixed charges as well as variable costs. This module first examines the relationship between the fixed and variable costs for each resource to determine the optimal levels of those resources. SENDOUT® then optimally sizes the resource options for the entire portfolio, to provide the least-cost solution. A detailed overview of the SENDOUT® model, duplicated by permission of New Energy Associates, is provided as Attachment 7.

For purposes of this filing, the SENDOUT® model optimizes the portfolio for normal and design weather and various economic growth scenarios. The results provide the least-cost dispatch solution over the five-year planning horizon for a given weather

pattern. The Company utilizes the output produced by the model to identify the mix of resources required, excess resources, supply shortages, and the costs of serving demand. The results provide the basis for the Company's five-year gas supply portfolio plan, including any modifications required to meet projected demand.

The SENDOUT® model provides a mechanism for a detailed simulation of the least-cost dispatch of the Company's supply resources under alternative demand scenarios. In the case of NSTAR Gas, it serves as the Company's primary "what if" planning tool for testing the operational and economic consequences for a wide variety of supply and DSM alternatives.

C. Supply Planning Process

1. Needs Determination

The foundation of the Company's resource-procurement process is the firm load sendout forecast. The firm load sendout forecast, for both normal and design-weather conditions, is segregated by customer group on a daily, monthly, seasonal, and annual basis. Using the SENDOUT® optimization model, the Company evaluates whether the existing level and mix of both supply-side and demand-side resources is sufficient and optimal to meet the projected firm sendout. For example, if the Company is using a significant amount of supplemental gas to meet demand under normal weather conditions, the results of the SENDOUT® model may indicate that the procurement of additional pipeline resources is warranted to reduce costs.

a. <u>Identification and Evaluation of Resources Alternatives</u>

(i) Supply-Side Resources

NSTAR Gas maintains continuous contact with the market through formal and informal solicitations for new resources. The Company monitors FERC certificate filings

for pipeline transportation and storage expansions that could affect the New England region, as well as current and future developments that would increase access to gas resources from a variety of supply basins. In addition, the Company maintains an extensive list of industry contacts with whom it conducts business on a regular basis. Therefore, the Company has a large number of potential suppliers to send Requests for Proposals ("RFPs") when or if a particular need arises. For term supplies and/or asset management services, the Company regularly issues RFPs to numerous service providers who have previously submitted competitive proposals, or who are active in the New England area. A copy of a recent RFP that the Company issued for the 2004-2005 winter period is provided as Attachment 5.

Upon determining that there is an incremental need for pipeline capacity, storage capacity or peaking capacity (as determined by annual, seasonal, or peak-day deficiencies in the results of the SENDOUT® model run outputs), the Company considers a wide range of potential resource options including pipeline supplies, supplemental supplies, DSM resources, and other available alternatives (e.g., sharing arrangements with industrial and electric generation facilities) to satisfy the identified need. The Company issues an RFP to all potential qualified vendors to meet the need on a least-cost basis, consistent with the Company's cost and non-cost criteria. The responses to an RFP identify the available commodity resource alternatives and are assessed and evaluated using several cost and non-cost criteria in order to conduct a preliminary screening.

The most competitive responses are then subject to a more detailed analysis, in which price and non-price factors are evaluated. In performing this task, the Company also monitors and evaluates its existing supplies, as well as alternative supply options.

The Company determines whether sufficient flexibility exists to renegotiate or otherwise alter the terms and quantities purchased by the Company from existing resources in order to make least-cost supply planning decisions.

The criteria used in evaluating the proposals received through RFPs or other means are described more fully below. However, the Company generally evaluates new resources based on cost, and non-price characteristics including reliability, availability, diversity of supply, flexibility, financial viability and other relevant ancillary criteria that may apply to a particular supply source.

(ii) <u>Cost Analysis</u>

The goal of the cost analysis is to determine the Company's total portfolio cost over the planning horizon. Because each resource alternative can differ significantly in the type of service provided and in its pricing components, the Company employs the SENDOUT® optimization model to determine the choice and size of an optimal mix of resources in a way that minimizes the cost of the portfolio, consistent with operational constraints. The model is capable of analyzing supply options, transportation and storage options and changes in rate structures and demand-side alternatives at par with supply-side resources.

(iii) Analysis of Non-Cost Factors

In addition to making a cost comparison, the Company analyzes a number of non-cost attributes for each resource alternative. These factors include reliability, diversity, flexibility, and financial viability. Although non-cost factors are not quantified like cost-based factors, such factors are critical to the development and management of a balanced portfolio.

Reliability is a crucial qualitative factor that refers to the ability of a supplier to fulfill commitments based on past performance, its operational strengths and proffered terms and conditions. With respect to the Company's resource planning, reliability refers to the degree of assurance that a resource will be available on demand for utilization in meeting the Company's demand requirements. A supplier's willingness and ability to provide warranties or supply assurances commensurate with the level of "firmness" sought is an indicator of reliability, as is a supplier's financial strength.

Financial strength is measured through an assessment of historical and projected financial resources that demonstrate a potential supplier's competency as a long-term natural gas supplier and a capability of meeting all commitments. In addition, the Company's accounting department provides an in-depth analysis of potential suppliers' annual reports and SEC filings in order to assess the financial viability of firm suppliers.

Another key qualitative factor is diversity. This refers to a potential supplier's ability to access supplies from a variety of producing basins, to engage in trading activities in several market areas and on different pipelines and to access storage and transportation resources.

From the Company's perspective, diversity is achieved by maintaining a supply portfolio that is structured such that any single supply or transportation disruption will have a minimal impact on the Company's overall supply situation. In terms of the Company's overall portfolio, diversity is achieved by obtaining supplies from multiple access areas and liquid receipt points, such as the U.S. Gulf coast (both on and offshore) and Canadian supply basins, and using multiple pipeline routes and a mix of market area storage and peak-shaving facilities.

Flexibility is another important non-price factor that is evaluated by the Company. Flexibility may refer to the ability of a potential supplier to adjust supplies to match changing system demands caused by temperature or other factors. Because the Company's demand profile exhibits a high degree of temperature sensitivity and seasonality, sendout volumes vary on a monthly or daily basis. Therefore, the Company's portfolio is composed of a mix of resources including supplies delivered via long-haul pipeline capacity, storage and peak-shaving facilities that can be used in various combinations to meet specific needs. The Company determines the characteristics of the aggregate firm demand to be served and then builds its portfolio to best match that demand, thus minimizing exposure to potential pipeline penalties or balancing charges.

b. <u>Demand Side Resource</u>

The Company identifies and evaluates energy efficiency on an equal basis with available supply-side options. The Company uses the same criteria, data and standards for testing demand-side resources as it uses to evaluate supply-side options. The process starts with the development of an avoided energy supply cost study against which potential energy efficiency options are evaluated. The avoided cost estimates used to screen programs were developed by ICF Consulting in August 2003 and were used in support of the Company's most recent Pre-Approval of Energy Efficiency Programs filing in D.T.E.04-37. When translated to a unit value, the avoided costs serve as the benchmark for evaluating whether a particular energy efficiency measure is cost-effective in comparison to supply-side options, and thus eligible for further consideration and possible implementation.

As part of the Company's pre-approval filing in D.T.E. 04-37, a comprehensive set of potential energy efficiency options was identified and budgets were developed estimating the cost of the programs, likely penetration rates, and expected savings. These options were then tested against the avoided costs to determine their cost-effectiveness.

Screening was conducted using a Total Resource Cost ("TRC") Test, as specified by the Department in D.T.E. 98-100, Guidelines for the Methods and Procedures for the Evaluation and Approval of Energy Efficiency Programs (February 7, 2000). The TRC test, which includes the value of avoided gas supply, transmission, and distribution costs, also takes into account the direct economic benefits and costs of a program to participating customers.

As approved by the Department in D.T.E. 04-37, the Company currently offers a mix of regional and Company specific programs that are, for the most part, market driven. The Company offers traditional DSM weatherization programs to its low-income and residential customers. The Company also offers regional market transformation programs including heating, water heating, and thermostat rebates, and the ENERGY STAR® homes and windows programs to its residential customers. Small C&I customers are eligible for heating and water heating rebates. The thermostat and infrared heating rebate programs and a program that promotes new high efficiency technologies are also available to C&I customers.

Application of the Process

The Company continually seeks ways to reduce the cost of serving its firm sales customers without compromising the reliability of service. Since the implementation of FERC Order No. 636 in 1993, the Company has used capacity release, off-system sales, and portfolio asset management strategies to manage its supply resources in an efficient

and cost-effective manner. Given the continuing process of retail restructuring, the Company continues to pursue a strategy of short-term (one year or less) contracts for commodity purchases. Use of off-system sales, capacity release and asset optimization strategies has enabled the Company to maintain a capacity portfolio that is designed to meet peak-day requirements and to address unexpected increases in demand over the winter season, while mitigating the costs associated with those assets when temporarily not needed to supply firm sales needs.

The Company also regularly evaluates new services, alternative uses for existing resources, and the possible improvement of existing resources, in a continual effort to maintain reliability and reduce costs. Whenever a new project or capacity offering is made, the Company evaluates the proposal to make a determination of whether the resource would improve the overall position of the Company's resource portfolio. Analysis using the SENDOUT® model, spreadsheets and operational knowledge is undertaken and the results are discussed among the members of the supply planning staff, who may add further insight to the need that a project may fill or to synergies that a particular offering may provide with the existing portfolio. When a proposal fits properly into the Company's portfolio, it is acted upon. This strategy has enabled the Company to develop a cost-effective, reliable resource portfolio. Specific actions taken over the past several years to this end are described below.

a. <u>Tennessee Gas Pipeline - Contract Restructuring</u>

The bulk of the Company's Tennessee Pipeline contracts are currently scheduled to expire on October 31, 2006, and require a one- year notice to terminate.

Tennessee Longhaul Transportation Contracts

The Company holds a number of 365-day contracts to transport gas from production areas to the Company's city gates or to underground storage facilities. These contracts are the most cost-effective resources available to the Company and are the only long-haul contracts available to serve the Worcester Division, which is the Company's largest service area. Given these factors, the Company renewed these contracts for a three-year time period in 2003 to coincide with the Department's three-year transition period. There are no viable alternatives to these contracts. The Company plans to renew these contracts for the five- year minimum term required by Tennessee.

Tennessee FS Storage and Associated Transport

These contracts provide the right to store gas in Tennessee's market-area storage and to transport gas from storage to the Company's city gates. The storage contract enables the Company to draw on needed seasonal supplemental gas and to deliver it to Massachusetts on a firm basis. It also provides daily and intra-day flexibility that is essential for balancing the load requirements of firm sales customers as well as transportation customers. Tennessee's FS storage rates are among the most cost-effective of all storage providers. Therefore, the Company elected to extend these contracts for the full minimum five-year contract term.

b. <u>Dominion Transmission</u>

Contract 300057 on Dominion Transmission, Inc. ("DTI" – formerly Consolidated Natural Gas or "CNG") provides storage service at Ellisburg, PA and delivers storage gas into Tennessee. The primary term of the contract is due to expire on

March 31, 2007 and would continue in year-to-year evergreen status, unless either the pipeline or the Company provided a two-year notice of termination, consistent with Article III of its service agreement. DTI issued such a notice to the Company in March 2005.

Because the contract is one of the more cost-effective storage services available to the Company, and because it fills an important role as a seasonal supplemental resource and is necessary for balancing purposes, the Company has indicated its intention to renew the contract.

c. Capacity Assignment

In its February 1999 Order in D.T.E. 98-32-B, the Department required mandatory capacity assignment of LDC portfolio resources to customers migrating to transportation service after February 1, 1999. The amount and types of capacity assigned are based on a customer's load factor and contribution to design-day démand. NSTAR Gas implemented its capacity assignment program on December 1, 2000. As of May 2005, 25,800 MMbtu/day of pipeline transportation, storage and LNG deliverability have been assigned to transportation customers or their agents. The annual demand charges associated with these assignments is about \$3.8 million, which is credited to firm sales customers in the Cost of Gas Adjustment charge filing. Table VI-2 below identifies the capacity assignments that are current as of the date of this filing.

Table V-2: Capacity Assignment

Volume (MMBtu)/day	Percentage of Total Resource
9,703	6.7%
4,774	6.1%
11,323	5.4%
	(MMBtu)/day 9,703 4,774

d. Pending Contract Notifications

During the forecast period (through 2010), the contract terms of a number of the Company's critically needed firm transportation and storage contracts will expire. Generally, the contracts have a one-to two-year notice requirement, with an automatic five-year rollover if termination notices are not given by the Company. Table VI-3, below identifies the Company's pending contract expirations.

Of particular importance to the Company's portfolio are the majority of the Company's Tennessee contracts, which represents capacity that is critical to serve the Company's Worcester Division. In addition, these resources represent some of the lowest cost supplies available to the resource portfolio. Therefore, the Company's resource portfolio assumes the renewal of all expiring transportation and storage contracts during the forecast horizon.

In its Gas Unbundling Order, D.T.E. 98-32-B, the Department stated that LDCs would maintain the obligation to plan for and procure capacity to meet the needs of firm customers and capacity eligible transportation customers until such time that the Department determines that the upstream capacity market can be relied upon for the provision of reliable, low-cost gas deliveries. On January 12, 2004, the Department initiated a follow-up investigation of the status of natural gas unbundling proceeding in

D.T.E. 04-1, and is expected to issue an order in that proceeding. Because the order has not been issued prior to this filing, the Company is assuming in this filing that it will continue to be responsible for acquiring resources for firm sales customers and capacity eligible firm transportation customers. Before acquiring any incremental firm, long-term resources, the Company will seek the Department's approval, in accordance with the Department's current regulations.

Therefore, in making contract-renewal decisions during the forecast period, the Company will evaluate several factors including: (1) whether the capacity is needed to meet current and future design-day and design-season requirements; (2) whether alternatives exist which are equally reliable and more cost-effective; and (3) input from marketers that are currently being assigned capacity under the Company's mandatory capacity assignment program.

Since the Company currently has an obligation to plan and procure capacity on behalf of firm customers, the Company intends to protect its capacity rights to needed resources until the Department makes the determination that the upstream capacity market is sufficiently competitive to warrant a modification of its obligation to procure and plan for the capacity needs of the Company's customers.

Table VI-3: Pending Contract Expirations

Pipeline	Contract	Service	127	* · · · · · · · · · · · · · · · · · · ·	
Tennessee	201		Notification	Termination	
	201	Storage Transportation	10/31/05	10/31/06	
Tennessee	2376	Storage Transmit		10/31/00	
D		Storage Transportation	10/31/05	10/31/06	
Tennessee	625	Longhaul Transportation	10/21/05		
Tennessee			10/31/05	10/31/06	
i cimessee	629	Longhaul Transportation	10/31/05	10/21/06	
r			10/21/03	10/31/06	
Tennessee	630	Longhaul Transportation	10/31/05	1010111	
Tennessee	526		10/21/02	10/31/06	
i cinicssee	526	Storage	10/31/05	10/21/06	
			10131103	10/31/06	

Texas Eastern	331701	Storage Transportation	03/31/04	03/31/06
Texas Eastern	331723	Storage Transportation	03/31/04	03/31/06
Texas Eastern	331820	Storage Transportation	03/31/04	03/31/06
Dominion	300057	Storage	03/31/05	3/31/07
Dominion	600005	Storage	03/31/04	3/31/06
Transco		Transportation	6/30/07	6/30/08
National Fuel	E00521	Transportation	03/31/05	3/31/06

Information Request: AG-2-4

August 1, 2006

Person Responsible: Max A. Gowen

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<u>Information Request AG-2-4</u>

Please identify any difference between the forecasted growth in demand predicted in the Company's most recently filed long-range forecast and supply plan at the time the Company filed it, and the need identified in any analysis and forecasting process described in the Company's response to AG-2-3.

Response

As noted in the response to Information Request AG 2-3, there were no additional forecasts used to generate the July 2005 RFP.

D.T.E. 06-44

Information Request: AG-2-5

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-5

Identify and explain any decreases in customer demand that the Company experienced in the past five years and include supporting workpapers and documentation.

Response

The table below shows actual average use per customer by customer class, derived from Company sales data. The change in actual average use per customer is generally driven by changes in Effective Degree Days from year to year as much of the Company's sales load is temperature sensitive heating load, particularly in the residential, commercial, and municipal classes. The industrial class is less temperature sensitive and influenced to a greater degree by changes in economic conditions.

Nstar Gas Company 2001-2005 Average Use Per Customer Sales (MMBtu's)

Danislautial	Sale	s (MMBtu's)	
Residential			
Year	<u>Sales</u>	Customers	Avg Use/Customer
2001	21,134,783	223,259	95
2002	21,218,434	224,539	94
2002	24,440,665		1 7.
2003		226,836	108
	22,979,772	228,503	101
2005	21,756,047	230,362	94
Commercia			1
Year	<u>Sales</u>	Customers	Avg Use/Customer
0004	40.054.700	00.474	0.47
2001	13,051,762	20,171	647
2002	13,140,911	20,399	644
2003	16,044,713	20,741	774
2004	15,401,156	21,157	728
2005	15,281,846	21,527	710
Municipal			
Year	<u>Sales</u>	Customers	Avg Use/Customer
]
2001	2,362,894	1,477	1,600
2002	2,282,344	1,513	1,509
2003	2,776,061	1,538	1,805
2004	2,737,911	1,557	1,758
2005	2,793,737	1,578	1,771
Industrial			
Year	<u>Sales</u>	Customers	Avg Use/Customer
2001	6,533,476	875	7,469
2002	5,974,726	884	6,759
2003	5,440,630	892	6,100
2004	5,542,330	881	6,289
2005	5,265,400	865	6,090
TOTAL			
Year	<u>Sales</u>	<u>Customers</u>	Avg Use/Customer
2001	43,082,915	245,782	175
2002	42,616,416	247,335	172
2003	48,702,068	250,008	195
2004	46,661,168	252,099	185
2005	45,097,030	254,332	177

Information Request: AG-2-6

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-6

Please illustrate how the virtual storage aspect of the proposed agreement, provided as Exhibits MAG-2, Confidential Attachments (a)-(c) ("NEA Agreement") makes that agreement flexible when compared to:

- (a) an agreement that does not include a any storage, but provides for direct purchase of gas, and;
- (b) an agreement that includes actual storage.

Response

- a) A gas purchase agreement would require the Company to purchase the full maximum daily quantity ("MDQ") on each of the 151 days of the winter season. The virtual storage service provides the Company with the opportunity to nominate on a daily basis from 0 MMBtu/day up to the full MDQ of 14,000 MMBtu/day for the entire winter season for a total winter season quantity up to 1,400,000 MMBtu (equivalent to a 100-day service). Accordingly, the virtual storage service provides the Company with significantly greater flexibility than a gas purchase agreement.
- b) Under the terms of the NEA Agreement, the purchase flexibility matches the withdrawal flexibility in the Dominion GSS tariff, and thus, the flexibility offered by the NEA Agreement is equivalent to the flexibility that would have been available had NSTAR Gas procured actual storage service from NEA. However, the NEA Agreement does not offer NSTAR Gas the right to inject gas during the winter season, which is a right that would have been available if NSTAR Gas controlled the NEA upstream contracts. NSTAR Gas sought this right, but NEA did not agree to offer it.

Information Request: AG-2-7

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-7

Please refer to Exhibit MAG-2(c), at 14, sections (a)-(c) (CONFIDENTIAL). Describe the Company's options to obtain a replacement gas supply if the NEA Agreement terminates pursuant to the terms outlined in sections (b) and (c)? Identify which options that the Company will likely choose in the event that it must find a replacement resource and indicate why those options are most attractive.

Response

The provisions of Exhibit MAG-2(c) **CONFIDENTIAL** referenced in the question address the right of NEA to permanently assign and/or release its DTI and Texas Eastern contracts (the "Upstream Components") to NSTAR Gas during the term of the NEA Agreement. Should NEA choose to exercise this right, NSTAR Gas would take control of these resources NSTAR Gas would then have the desirable option of purchasing summer injection gas from its portfolio management contract and nominating winter withdrawals on a daily basis as needed. It could also use the winter injection capability to manage even greater load swings driven by changes in weather. Accordingly, if NEA offers NSTAR Gas the ability to take over NEA's Upstream Components, the cost to NSTAR Gas's firm customers will decrease and the NSTAR Gas portfolio flexibility will increase.

Information Request: AG-2-8

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-8

Please provide summary schedules from the SENDOUT model runs that the Company relied upon in selecting Northeast Energy Associates, A Limited Partnership ("NEA") as the winning bidder. Identify and explain the specific conditions that were modeled, what price input assumptions were made, what load assumptions were made and identify the annual amount of surplus capacity and it's cost to customers. Provide all supporting workpapers, documentation and assumptions.

Response

Please see the Company's response to Information Request DTE-1-7 **CONFIDENTIAL**.

Information Request: AG-2-9

August 1, 2006

Person Responsible: Max A. Gowen

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<u>Information Request AG-2-9</u>

Please refer to the Company's response to AG-1-24. Define the simple calculation and identify all assumptions.

Response

The storage contract starts each winter full at 1,400,000 MMBtus. Whatever quantity gets withdrawn in the winter gets replaced evenly over the seven summer months. If X represents the total winter withdrawal from the contract, X/7 equals the summer monthly injection quantity.

Information Request: AG-2-10

August 1, 2006

Person Responsible: Max A. Gowen

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<u>Information Request AG-2-10</u>

Refer to the Company's response to AG-1-16. According to the Company's most recent cost of gas adjustment ("CGA") filing estimated off peak firm sales decreased more than 12.5 percent from the prior year's estimate. Please explain the reason for the difference and provide all supporting documentation, forecasts and calculations. Is the forecast decrease is short-term or longer-term? Identify how this change in the level of demand will effect the Company's future forecasts? Please provide a detailed response.

Response

As can be seen from the off-peak sales forecast of 83,012,415 therms in the March 15, 2005 filing and the off-peak sales forecast of 81,897,682 therms in the September 15, 2005 filing, the forecasts are down by only by 1.34 percent mainly due the slow economic recovery forecasts. Generally, the Company does not change the off-peak forecasts filed in March from the forecasts filed in September. However, after the Company finalized its 2006 forecasts during the summer of 2005, the country was hit with two major hurricanes, Katrina and Rita, and gas prices reached an all time high. The Company's sales compared to forecasts for the 4th quarter of 2005 and the first two months of 2006 were down by 12.3 percent and 8.5 percent respectively.

Higher gas prices were having an impact on sales and the Company had to modify its forecasts downwards. Modeling was not a viable option because there was not enough data to account for this behavior. The only viable option was to make an ad-hoc adjustment based upon collective judgment. Besides weather, many other reasons were suggested for this shortfall, including the use of alternate devices like electric heaters or wood stoves for keeping warm, replacing gas usage with oil by dual fuel customers, increased conservation and delay or cancellation of some new projects. Because it was difficult to account for the impact of each possible cause separately, after discussions with our sales staff, the Company decided to lower the demand forecasts on an ad-hoc basis as shown in the attached table.

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Adjus	Adjusted Demand Forecast (March 06 CGA)													
Year	<u>Class</u>	<u>Jan</u>	Feb	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	Oct	Nov	Dec	Total
2006	Capacity Eligible	606	515	492	363	276	233	211	211	232	303	402	518	4,362
2006	Firm	7,718	5,959	4,909	2,782	1,417	936	787	787	970	2,032	3,711	5,909	37,917
2006	MIT	99	138	165	165	171	165	171	171	165	171	165	154	1,900
2006	Company Use					3	2	2	2	2	4			
2006	Line Loss					69	47	40	40	46	91			_
2006	Off Peak Demand					1,588	1,101	958	958	1,135	2,203			7,943
2006	Off Peak Sales					1,515	1,052	917	917	1,087	2,108			7,596
Year	ial Forecast (Septem Class	ber 05 CC <u>Jan</u>	iA) Feb	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	Jul	Aug	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>
2006	Capacity Eligible	606	515	492	363	276	233	211	211	232	303	402	518	4,362
2006	Firm	8,300	6,409	5,281	2,995	1,523	1,006	845	845	1,042	2,184	3,988	6,351	40,769
2006	MIT	99	138	165	165	171	165	171	171	165	171	165	154	1,900
2006	Company Use					4	3	2	2	3	6			
2006	line Lees					51	34	28	28	35	73			
	Line Loss					ŞΙ	54	20	20	55	,,,			
2006 2006 2006	Off Peak Demand Off Peak Sales					1,694	34 1,171	20 1,016	1,016	1,207	2,355			8,459

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Information Request: AG-2-11

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Person Responsible: Max A. Gowen

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Information Request AG-2-11

Please provide the difference in the cost to customers between the DTI storage and transportation arrangement, if NSTAR purchased the gas and the proposed virtual storage provisions. Include all supporting documentation, workpapers and assumptions.

Response

REDACTED RESPONSE

The proposed NEA Agreement flows through all of the FERC approved rates for these contracts (which would be the same whether NEA owned the contracts or NSTAR Gas owned the contracts). The NEA Agreement also includes an "Annual Fuel Surcharge" and an "Annual Storage Management Fee", which would both be eliminated if NEA permanently released to contracts to NSTAR Gas.

The full FERC Tariff upstream contract costs include:

Annual Costs of NEA Upstream Contracts

Dominion Transmission GSS Storage Deliverability - Demand Capacity - Demand Injection Withdrawal Fuel % (at injection)	Dth 14,000 1,400,000	\$/Dth/Mo \$1.8825 \$0.0145 \$0.0202 \$0.0169	\$/Year \$316,260 \$243,600 \$28,280 * \$23,660 *
ruei 70 (at injection)	2.36%		
FT-GSS			
Demand	14,000	\$4.4230	\$309,610
Commodity		\$0.0245	\$33,254 *
Fuel %	3.05%		
Texas Eastern FTS-5 Demand	14,000	\$5.1790	\$870,072
Commodity		\$0.0018	\$2,443 *
Fuel %	0.00%		•

^{*} Annual commodity costs assume maximum annual quantities.

The "Annual Storage Management Fee" is [REDACTED] per year and the "Annual Fuel Surcharge" is equal to the [REDACTED].

Information Request: AG-2-12

August 1, 2006

Person Responsible: Max A. Gowen

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Information Request AG-2-12

What security has NEA provided to NSTAR to protect customers should NEA become financially unable to perform under the terms of the NEA Agreement? Please explain, in detail, how NSTAR determined that the security provisions were sufficient.

Response

NEA provided a parental guaranty from FPL Group Capital, Inc. for a total of \$20,000,000. The Parental Guaranty agreement was filed as part of Exhibit MAG 2(b) **CONFIDENTIAL**.

The estimated value of the full contract quantity of gas when the storage would be full by the end of the summer was estimated at about \$14,000,000 (1,400,000 MMBtus at about \$10.00/MMBtu).

NSTAR Gas negotiated a \$20 million guarantee from NEA's parent, FPL Group Capital, which was deemed sufficient to cover the \$14 million plus any market run up in gas prices if NEA failed to deliver the gas in the following winter. FPL Group Capital, Inc. has a Senior Unsecured Debt rating by Standard and Poor's of A-. There is an unsecured credit limit of \$35 million under NSTAR's credit policy for a company of this rating so the \$20 million level was acceptable for a company of this rating. In addition, the NEA plant output is sold to NSTAR subsidiaries Boston Edison Company and Commonwealth Electric Company under long-term purchase power agreements. NEA debt rating reflects NSTAR's A+ rating which would allow additional credit exposure through NEA. This additional coverage was not explicitly calculated but with the \$20M guarantee, security was deemed to be more than sufficient.

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Information Request AG-2-13

Refer to the Company's response to AG-1-1(e), Bates at 7 (CONFIDENTIAL). In this response there is a discussion of the acquisition of additional capacity through release or expansion to serve two of the Company's divisions. What is the status of this acquisition and how does it affect the need described in the discussion?

Response

The document referred to was prepared in February 2005 and provided an analysis of the Responses to NSTAR Gas's January 2005 RFP. The document stated that NSTAR Gas's winter supply issue at the time had two components, a winter supply component and a New Bedford Division capacity component. Some supply options could also address parts of the New Bedford Division capacity and some supply options could not, depending on where the supply options were actually delivered to NSTAR Gas. The document supported the selection of the NEA supply as the appropriate supply option, but indicated that additional steps had to be taken to resolve the New Bedford Division's capacity issue. As pointed out in Exhibit MAG-1, page 19, the NEA bid won the January 2005 RFP process, but in May 2005, it decided to withdraw its offer.

In May 2005, NSTAR Gas began discussions with Dartmouth Power concerning NSTARGas's acquisition of the Dartmouth Power Algonquin capacity. The discussions led to the Company's June 30, 2005 filing with the Department in D.T.E. 05-47. The Department approved NSTAR Gas's acquisition of the capacity on September 8, 2005.

The Dartmouth Power capacity solved the basic New Bedford Division capacity issue for NSTAR Gas in getting 14,010 MMBtu/day of gas delivered on a primary firm basis to Dartmouth. The Company noted in Exhibit MAG-1 of the D.T.E. 05-47 proceeding that it was participating in the Algonquin G-system expansion Open Season to determine the possibility of diverting 6,500 MMBTU of the Dartmouth capacity from Dartmouth to Plymouth and 2,500 MMBtu from Dartmouth to Pine Hills. Algonquin is currently in the process of preparing the initial drafts of the contract. Once an agreement between NSTAR Gas and Algonquin for the diversion of the 9,000MMBtu/day of Dartmouth capacity from the Dartmouth Station to the Plymouth and Pine Hills Stations is complete, it will fully address the issues raised in the referenced document regarding the New Bedford Division's capacity.

NSTAR Gas's July 2005 RFP was designed to acquire supplies to use the Dartmouth Power capacity. The NEA Agreement submitted in this proceeding is based on that RFP process. Should the Department approve the NEA Agreement, NSTAR Gas will work with Algonquin to change the firm primary delivery points for the NEA Agreement

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(14,000 MMBtu/day) from Bellingham, MA to existing NSTAR Gas take stations in NSTAR Gas's Framingham Division. NSTAR Gas does not anticipate that there will be any incremental facility costs associated with changing the primary delivery points. This will address the other Algonquin capacity-related issues raised in the referenced document.

Information Request: AG-2-14

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Information Request AG-2-14

Refer to the Company's response to AG-1-9. Please provide the same data tables broken down by the Company's service areas, Framingham, Worcester, Cambridge, New Bedford and Plymouth.

Response

The Company dispatches gas on an integrated, system-wide basis. As stated in Exhibit MAG-1, pages 4 through 6, the Worcester Division is primarily served by Tennessee and the other divisions are served by Algonquin. There is limited internal transfer capability between the Framingham and Worcester Divisions. Liquified natural gas ("LNG") from the Hopkinton facility can be used directly in the Framingham and Worcester Divisions. LNG from the Acushnet facility can be used only in the New Bedford Division. A separate divisional breakdown of the information in the table would not be meaningful because of the interdivisional transfer capabilities.

Information Request: AG-2-15

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Information Request AG-2-15

How will the Company benefit from the Algonquin G Lateral Expansion Project filed with FERC on April 21, 2006? Please describe the project and how it will affect future Company resource acquisitions and planning.

Response

Algonquin's April 21, 2006 FERC filing is a FERC 7(C) application for facilities that Algonquin will be constructing for an extension of the G-Lateral pipeline onto Cape Cod. Therefore, the Company does not currently anticipate that this extension would affect the Company's future resource acquisitions and planning.